

G V R Distribution System

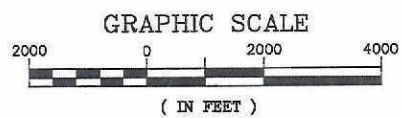
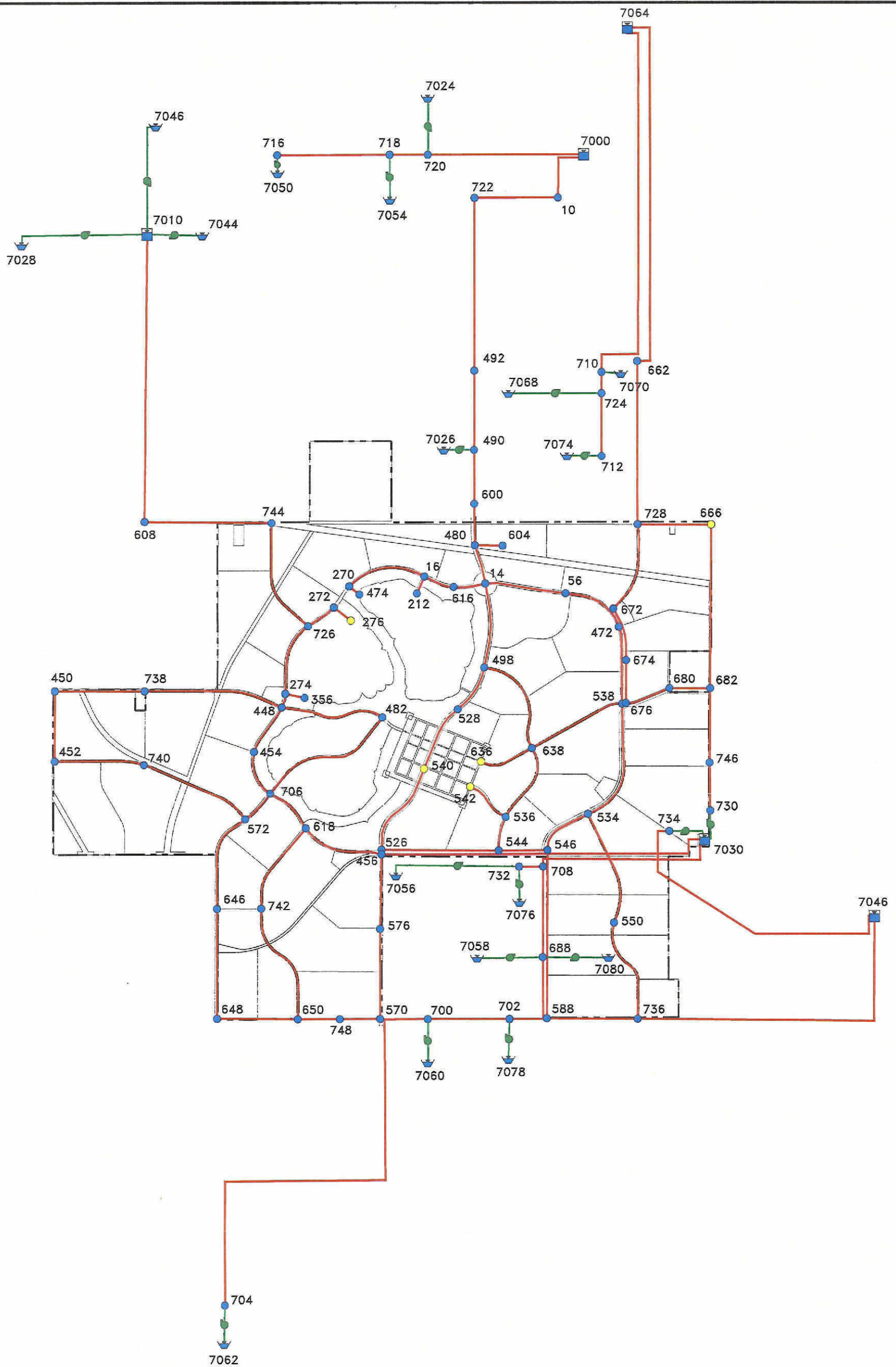
Version 1.0

GVR Distribution System

Pipeline Diameter Map

Node ID Map

Pipe ID Map



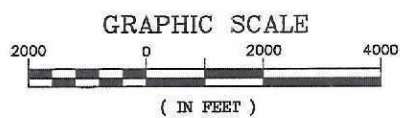
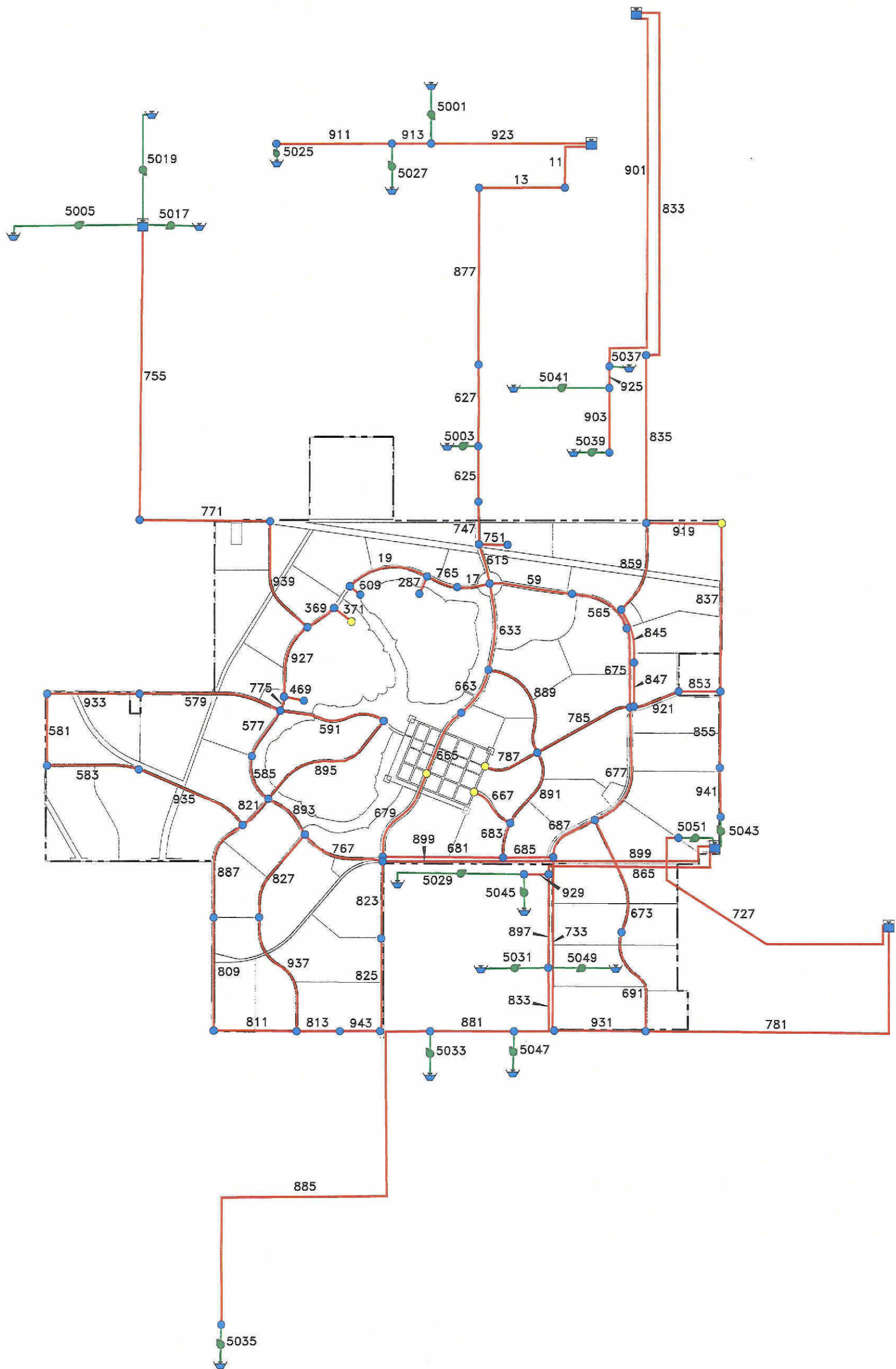
LEGEND

- | | | | |
|--|--------------|--|-----------------------|
| | H2O MAP PIPE | | 680 H2O MAP NODE ID |
| | H2O MAP PUMP | | 540 NODE W/ FIRE FLOW |
| | STREETS | | RESERVOIR |
| | PARCEL LINE | | WELL |

FIGURE C-1
NODE ID MAP
H2O MAP WATER

GOLDEN VALLEY RANCH
WATER AND SEWER
MASTER PLAN

FEB 2006



LEGEND

- | | | | |
|--|-----------------|--|-------------------|
| | H2O MAP PIPE ID | | H2O MAP NODE |
| | H2O MAP PUMP ID | | NODE W/ FIRE FLOW |
| | STREETS | | RESERVOIR |
| | PARCEL LINE | | WELL |
| | SITE BOUNDARY | | |

FIGURE C-2
LINK ID MAP
H2O MAP WATER

GOLDEN VALLEY RANCH
WATER AND SEWER
MASTER PLAN

FEB 2006

GVR Distribution System

Maximum Day + 1500 GPM FF 2650PZ

Model Output

Golden Valley Ranch Distribution System - Max Day + FF Node Report

ID	Demand (mgd)	Elevation (ft)	Head (ft)	Pressure (psi)
10	0.000	2,690.00	2,748.04	25.15
14	0.222	2,565.00	2,735.87	74.04
16	0.083	2,542.00	2,735.84	83.99
212	0.000	2,542.00	2,735.84	83.99
270	0.129	2,518.00	2,735.80	94.37
272	0.203	2,515.00	2,641.14	54.65
274	0.102	2,495.00	2,641.35	63.41
276	2.160	2,515.00	2,632.12	50.75
356	0.418	2,495.00	2,640.18	62.91
448	0.102	2,490.00	2,641.35	65.58
450	0.436	2,485.00	2,638.52	66.52
452	0.258	2,465.00	2,638.52	75.19
454	0.232	2,475.00	2,641.43	72.11
456	0.816	2,500.00	2,644.28	62.52
472	0.318	2,625.00	2,735.87	48.04
474	0.400	2,518.00	2,735.09	94.06
480	0.295	2,560.00	2,736.26	76.37
482	0.420	2,519.21	2,641.15	52.84
490	0.000	2,570.54	2,738.43	72.75
492	0.000	2,597.29	2,740.71	62.14
498	0.237	2,567.00	2,735.52	73.02
526	0.000	2,502.00	2,735.55	101.20
528	0.000	2,557.00	2,735.38	77.29
534	0.554	2,592.00	2,736.64	62.67
536	0.000	2,550.00	2,735.40	80.33
538	0.418	2,620.00	2,735.89	50.22
540	1.911	2,529.00	2,735.20	89.35
542	1.911	2,540.00	2,734.85	84.43
544	0.000	2,540.00	2,735.98	84.92
546	0.437	2,565.00	2,736.64	74.37
550	0.666	2,580.00	2,738.87	68.84
56	0.337	2,600.00	2,735.87	58.87
570	0.257	2,460.00	2,638.26	77.24
572	0.447	2,460.00	2,640.21	78.09
576	0.483	2,478.00	2,640.88	70.58
588	0.681	2,515.00	2,739.75	97.38
600	1.542	2,560.00	2,736.87	76.64
604	0.400	2,572.00	2,736.05	71.08
608	2.580	2,525.00	2,644.20	51.65
616	0.000	2,555.00	2,735.85	78.36
618	0.243	2,475.00	2,642.28	72.48
636	1.911	2,550.00	2,734.70	80.03
638	0.496	2,572.00	2,735.34	70.77
646	0.211	2,430.00	2,639.09	90.60
648	0.146	2,410.00	2,638.29	98.92
650	0.124	2,430.00	2,637.89	90.08
662	0.000	2,718.00	2,832.10	49.44
666	1.008	2,655.00	2,820.64	71.77
672	0.258	2,621.00	2,821.16	86.73

Golden Valley Ranch Distribution System - Max Day + FF Node Report

ID	Demand (mgd)	Elevation (ft)	Head (ft)	Pressure (psi)
674	0.272	2,625.00	2,819.83	84.42
676	0.000	2,622.00	2,819.07	85.39
680	0.466	2,642.00	2,818.26	76.37
682	0.000	2,660.00	2,817.93	68.43
688	0.000	2,536.00	2,665.00	55.90
700	0.000	2,475.00	2,665.00	82.33
702	0.000	2,500.00	2,665.00	71.49
704	0.000	2,440.00	2,665.00	97.49
706	0.000	2,470.00	2,641.54	74.33
708	0.000	2,560.00	2,665.00	45.50
710	0.000	2,640.00	2,850.00	90.99
712	0.000	2,610.00	2,850.00	103.99
716	0.000	2,657.00	2,750.00	40.30
718	0.000	2,670.00	2,750.00	34.66
720	0.000	2,680.00	2,750.00	30.33
722	0.000	2,660.00	2,745.64	37.11
724	0.000	2,625.00	2,850.00	97.49
726	0.237	2,505.00	2,641.36	59.08
728	2.553	2,621.00	2,824.16	88.03
730	0.899	2,645.00	2,814.31	73.36
732	0.000	2,555.00	2,665.00	47.66
734	0.000	2,610.00	2,750.00	60.66
736	0.334	2,545.00	2,741.99	85.36
738	0.140	2,480.00	2,639.30	69.03
740	0.244	2,455.00	2,638.84	79.66
742	0.320	2,447.00	2,639.41	83.37
744	0.364	2,523.00	2,642.57	51.81
746	1.276	2,652.00	2,814.72	70.51
748	2.580	2,445.00	2,637.39	83.36

Golden Valley Ranch Distribution System - Max Day + FF Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (mgd)	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)
11	10	7000	2191	24	130	-5.076	2.50	1.96	0.89
13	10	722	2687	24	130	5.076	2.50	2.40	0.89
17	616	14	1029	24	130	-0.613	0.30	0.02	0.02
19	16	270	2642	24	130	0.530	0.26	0.04	0.01
287	16	212	590	8	130	0.000	0.00	0.00	0.00
369	726	272	1032	24	130	2.363	1.16	0.22	0.22
371	272	276	691	10	130	2.160	6.13	9.02	13.05
469	274	356	632	8	130	0.418	1.85	1.17	1.85
565	56	472	2158	24	130	-0.129	0.06	0.00	0.00
577	448	454	1689	24	130	-1.059	0.52	0.08	0.05
579	448	738	4499	12	130	0.570	1.12	2.05	0.46
581	450	452	2254	12	130	-0.006	0.01	0.00	0.00
583	452	740	2875	12	130	-0.264	0.52	0.32	0.11
585	454	706	1528	24	130	-1.291	0.64	0.11	0.07
59	14	56	2604	24	130	0.209	0.10	0.01	0.00
591	448	482	3356	12	130	0.190	0.38	0.20	0.06
609	270	474	418	8	130	0.400	1.78	0.71	1.71
615	480	14	1276	24	130	2.838	1.40	0.39	0.30
625	490	600	1744	24	130	5.076	2.50	1.56	0.89
627	492	490	2556	24	130	5.076	2.50	2.28	0.89
633	14	498	2718	24	130	1.795	0.88	0.35	0.13
663	528	498	1624	20	130	-0.875	0.62	0.14	0.08
665	528	540	2236	20	130	0.875	0.62	0.19	0.08
667	536	542	1527	20	130	1.911	1.36	0.54	0.36
673	534	550	3751	20	130	-2.527	1.79	2.24	0.60
675	472	538	2485	24	130	-0.446	0.22	0.03	0.01
677	538	534	4070	24	130	-2.151	1.06	0.74	0.18
679	540	526	3063	20	130	-1.036	0.73	0.35	0.11
681	526	544	3765	20	130	-1.036	0.73	0.43	0.11
683	544	536	1112	20	130	2.348	1.67	0.58	0.52
685	544	546	1570	24	130	-3.384	1.67	0.66	0.42
687	546	534	1868	24	130	0.178	0.09	0.00	0.00
691	550	736	3388	20	130	-3.193	2.26	3.12	0.92
727	734	7022	9771	24	130	0.000	0.00	0.00	0.00
733	588	546	5416	24	130	3.999	1.97	3.11	0.57
747	600	480	1330	24	130	3.533	1.74	0.61	0.46
751	480	604	896	12	130	0.400	0.79	0.21	0.24
755	7010	608	9244	24	130	5.868	2.89	10.80	1.17
765	616	16	1013	24	130	0.613	0.30	0.02	0.02
767	618	456	2694	24	130	-4.600	2.27	2.01	0.74
771	608	744	4088	24	130	3.287	1.62	1.63	0.40
775	274	448	455	24	130	-0.197	0.10	0.00	0.00
781	7022	736	10924	30	130	8.208	2.59	8.01	0.73
785	638	538	3259	20	130	-1.286	0.91	0.56	0.17
787	636	638	1784	20	130	-1.911	1.36	0.63	0.36
809	646	648	3529	16	130	0.831	0.92	0.80	0.23
811	648	650	2592	16	130	0.685	0.76	0.41	0.16
813	650	748	1350	16	130	1.080	1.20	0.49	0.37

Golden Valley Ranch Distribution System - Max Day + FF Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (mgd)	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)
821	572	706	1157	16	130	-1.998	2.21	1.32	1.15
823	576	456	2405	16	130	-2.241	2.48	3.41	1.42
825	576	570	2894	16	130	1.758	1.95	2.62	0.90
827	618	742	3077	12	130	0.839	1.65	2.87	0.93
833	662	7064	11881	24	130	-6.732	3.32	17.90	1.51
835	662	728	5268	24	130	6.732	3.32	7.94	1.51
837	666	682	5245	16	130	1.299	1.44	2.71	0.52
845	672	674	1730	16	130	1.614	1.79	1.33	0.77
847	674	676	1383	16	130	1.342	1.49	0.76	0.55
853	682	680	1305	16	130	-0.876	0.97	0.32	0.25
855	682	746	2400	16	130	2.175	2.41	3.22	1.34
859	672	728	2958	16	130	-1.872	2.07	3.00	1.01
865	708	7030	6098	30	130	0.000	0.00	0.00	0.00
877	722	492	5527	24	130	5.076	2.50	4.94	0.89
881	700	702	2623	20	130	0.000	0.00	0.00	0.00
883	702	688	3059	24	130	0.000	0.00	0.00	0.00
885	704	700	15658	20	130	0.000	0.00	0.00	0.00
887	646	572	3271	16	130	-1.043	1.16	1.12	0.34
889	498	638	3442	20	130	0.683	0.48	0.18	0.05
891	638	536	2594	20	130	-0.438	0.31	0.06	0.02
893	706	618	1637	24	130	-3.519	1.73	0.74	0.45
895	482	706	4626	12	130	-0.230	0.45	0.39	0.09
897	688	708	2927	24	130	0.000	0.00	0.00	0.00
899	7030	456	10833	24	130	7.657	3.77	20.72	1.91
901	7064	710	12536	24	130	0.000	0.00	0.00	0.00
903	712	724	2028	12	130	0.000	0.00	0.00	0.00
911	716	718	3621	12	130	0.000	0.00	0.00	0.00
913	718	720	1228	20	130	0.000	0.00	0.00	0.00
919	728	666	2355	16	130	2.308	2.56	3.52	1.50
921	676	680	1482	16	130	1.342	1.49	0.81	0.55
923	720	7000	5019	24	130	0.000	0.00	0.00	0.00
925	724	710	679	20	130	0.000	0.00	0.00	0.00
927	726	274	2408	24	130	0.323	0.16	0.01	0.01
929	732	708	771	24	130	0.000	0.00	0.00	0.00
931	736	588	2915	24	130	4.680	2.31	2.24	0.77
933	738	450	2877	12	130	0.430	0.85	0.78	0.27
935	740	572	3740	12	130	-0.508	1.00	1.38	0.37
937	742	650	3994	12	130	0.519	1.02	1.53	0.38
939	744	726	3767	24	130	2.923	1.44	1.21	0.32
941	746	730	1545	16	130	0.899	1.00	0.40	0.26
943	748	570	1295	16	130	-1.501	1.66	0.87	0.67

Golden Valley Ranch Distribution System - Max Day + FF Tank Report

ID	Demand (mgd)	Elevation (ft)	Head (ft)	Pressure (psi)	% Full (%)	Volume (MG)	Level (ft)
7000	-5.08	2,725.00	2,750.00	10.833	100	1.012	25
7010	-5.868	2,625.00	2,655.00	12.999	100	0.991	30
7022	-8.208	2,725.00	2,750.00	10.833	100	1.012	25
7024	0	1,668.00	1,668.00	0	100	0	0
7026	0	1,668.00	1,668.00	0	100	0	0
7028	0	1,668.00	1,668.00	0	100	0	0
7030	-7.657	2,635.00	2,665.00	12.999	100	0.991	30
7044	0	1,668.00	1,668.00	0	100	0	0
7046	0	1,668.00	1,668.00	0	100	0	0
7050	0	1,668.00	1,668.00	0	100	0	0
7054	0	1,668.00	1,668.00	0	100	0	0
7056	0	1,668.00	1,668.00	0	100	0	0
7058	0	1,668.00	1,668.00	0	100	0	0
7060	0	1,668.00	1,668.00	0	100	0	0
7062	0	1,668.00	1,668.00	0	100	0	0
7064	-6.732	2,825.00	2,850.00	10.833	100	1.012	25
7068	0	1,668.00	1,668.00	0	100	0	0
7070	0	1,668.00	1,668.00	0	100	0	0
7074	0	1,668.00	1,668.00	0	100	0	0
7076	0	1,668.00	1,668.00	0	100	0	0
7078	0	1,668.00	1,668.00	0	100	0	0
7080	0	1,668.00	1,668.00	0	100	0	0